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Referring now to FIGS. 6A-6D, yet another embodiment of a locator device 600 is illustrated, along with a method of using it. In this embodiment, the locator device 600 again includes a frame 602, having a first portion 604 and a second portion 606, attached to one another with a hinge 608, to delineate a first scalp segment 612 (or "procedure area"). The first portion 604 has a top side 616 with a first set of fiducials 610 attached to it, and the second portion 606 has a top side 618 with a first set of fiducials 613 attached to it. As with the method described previously, initial steps of the method may involve positioning the locator device 600, for example, on the scalp at a desired location to delineate the first scalp segment 612. In this embodiment, the locator device 600 does not include straps to attach the locator device 600 to the patient's head or a chair or the like. Instead, the top and bottom sides of the frame 602 may include two or more small pins, hooks, barbs, adhesive, or the like, to attach the frame 602 to the patient's scalp in a relatively stable manner. In alternative embodiments, one or more straps or other attachment devices may be used. It should be understood that small pins, barbs, adhesive, or the like may be used with the embodiments shown in FIGS. 5A-D.

Referring now to FIG. 6B, a second phase of the method may involve detaching the first portion 604 from the second portion 606 and flipping the first portion 604 over the second portion 606 to a new location on the scalp. When flipped over, a bottom side 620 of the first portion 604 is now facing up, along with fiducials 622 attached to the bottom side 620. At this stage, coupling members 614 (optional) on the first portion 604 are exposed. Also at this stage, the first portion 604 may not be directly secured to the scalp in some embodiments, but may simply be secured to the first portion via the hinges 608. Alternatively, the first portion 604 may be secured to the scalp using pins, hooks, needles or the like, located, for example, at each of the two corners of the first portion 604, in one embodiment. In this particular configuration, the hinges 608 additionally provide at least one connector, in the form of a pivot, connecting the first portion with the second portion, such that the first portion can only be moved a selected distance from the second portion due to the at least one connector 608.

Referring to FIG. 6C, in a next step, the second portion 606 may now be flipped over so that a bottom side 628 and bottom fiducials 624 on the second portion 606 are facing up. The coupling members 614 of the first portion 604 may then be connected with (e.g., inserted into) corresponding coupling members 626 (such as receptacles) of the second portion 606 to reform the frame 602. In some embodiments, the frame 602 may be reformed, and the two portions 604, 606 may be placed together without coupling members 614, 626. In these embodiments, at least one reference feature may include an edge of the first portion of the frame and a corresponding edge of the second portion of the frame, such that when the first portion is moved from a first location on the body surface to a second location, the edge of the first portion is made to abut the corresponding edge of the second portion.

Referring to FIG. 6D, the frame 602 is now reformed in a second location on the scalp, thus delineating a second scalp portion 630, which is immediately adjacent the first scalp portion 612. The frame 602 may be secured to the scalp via pins, hooks, needles or the like, and the procedure may be performed on the second scalp segment 630. These steps may be repeated as many times as desired to cover a desired total area of scalp. As with all of the above-described methods, the fiducials 610, 611, 622, 624 may be used to guide a robotic or computer-automated system to perform the procedure on the

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various body portions. As also described above, in alternative embodiments, fiducials may not be included.

Referring now to FIGS. 7A-7E, a side view illustrates the way in which the first portion 604 and the second portion 606 fit together during the method described above. FIG. 7A shows the first portion 604 and the second portion 606 coupled together in the first body surface location (delineating the first body surface segment). As discussed above, and as illustrated in FIGS. 7B and 7C, the first portion 604 of the locator device 600 may flip over the second portion 606, for example, via the hinge 608, to position the first portion 604 in the new, second location (FIG. 7C). The hinge 608 is sized to position the first portion 604 at a distance from the second portion 606 that will make subsequent body surface portions immediately adjacent one another.

In the next step, as shown in FIG. 7D, the second portion 606 is flipped over on itself (or in place). Finally, as shown in FIG. 7E, the first portion 604 and the second portion 606 are rejoined to reform the frame 602 in the second location and the coupling members 614 may fit into the recesses 626 (or "corresponding coupling members") on the first portion 604. In alternative embodiments, any of a number of alternative connecting structures may be used, such as hooks, pins, detents, magnets or the like. FIGS. 7A-7E illustrate various stages of the operation of the device according to one embodiment.

Numerous changes, variations, and substitutions will occur to those skilled in the art without departing from the invention. Various alternatives to the embodiments of the invention described herein may be employed in practicing the invention. It should be understood that the invention generally, as well as the specific embodiments described herein, are not limited to the particular forms or embodiments disclosed, but to the contrary cover all modifications, equivalents and alternatives falling within the scope of the appended claims. By way of non-limiting example, it will be appreciated by those skilled in the art that particular features or characteristics described in reference to one figure or embodiment may be combined as suitable with features or characteristics described in another figure or embodiment. Similarly, the devices and methods described herein may be used in manual, semi-automated and fully automated procedures, including image-guided and robotic procedures.

What is claimed is:

1. A method for performing a procedure on a body surface of a patient, the method comprising:
  - positioning a locator device on the body surface to delineate a first segment of a body surface;
  - performing the procedure on the first segment of the body surface;
  - moving a first portion of the locator device while leaving a second portion of the locator device stationary, the second portion providing a reference to guide movement of the first portion relative to the second portion; and
  - moving the second portion of the locator device to mate with the first portion to reform the locator device and delineate a second segment of the body surface.
2. The method of claim 1, further comprising performing the procedure on the second segment of the body surface.
3. The method of claim 2, further comprising:
  - moving the second portion of the locator device on the body surface while leaving the first portion of the locator device on the body surface;
  - moving the first portion of the locator device to reform the locator and thus delineate a third body surface segment; and